P.B. 5818 - Patentlaan 2 2280 HV Rijswijk (ZH) 窗 (070) 340 2040 Tx 31651 epo nl FAX (070) 340 3016 Europäisches Patentamt Zweigstelle in Den Haeg Recherchenabteilung European
Patent Office
Branch at
The Hague
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Division

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2.2. Jan. 2004

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PATENTANWÄLTE RECHTSANWÄLTE

Zeichen/Ref./Ref.
75 040 a/ip

Anmeldung Nr./Application No./Demande n°.//Patent Nr./Patent No./Brevet n°
98114979.2-2212/

COMMUNICATION

The European Patent Office herewith transmits the partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

Anmelder/Applicant/Demandeur//Patentinhaber/Proprietor/Titulaire KABUSHIKI KAISHA TOSHIBA

The applicant's attention is drawn to the following:

The search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within ONE MONTH after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,--) or the equivalent applicable on the date of payment is payable.

This applies also to the search fees requested under Rule 46(1) EPC.

See also OJ EPO 06/1999, 405.

The abstract was modified by the Search Division and the definitive text is attached to the present communication.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

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Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement to OJ EPO 02/1999.

REGISTERED LETTER



1

## PARTIAL EUROPEAN SEARCH REPORT

**Application Number** 

under Rule 46, paragraph 1 of the European Patent EP 98 11 4979 Convention

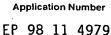
EP 0 752 668 A (\$ 8 January 1997 (\$ * column 2, line * page 4, right-  * column 8, line * figures 3A,5A-  0,X EP 0 704 820 A (\$ LTD ;TOKYO SHIBAL 3 April 1996 (199 * column 4, line	SUN MICROSYSTEMS INC,) 1997-01-08) 47 - line 51 * hand column * 10 - column 9, line 38 * 5C,6A * (AMAICHI ELECTRONICS COURA ELECTRIC CO (JP)) 96-04-03) 6 - line 13 * 36 - line 40; figure 11 DAYNE MAX L) 969-03-11)	1,2,4,5	GLASSIFICATION OF THE APPLICATION (Int.CI.6)  G06F13/40
8 January 1997 (1)  * column 2, line  * page 4, right-  * column 8, line  * figures 3A,5A-  0,X  EP 0 704 820 A (1)  LTD ;TOKYO SHIBAL  3 April 1996 (199  * column 4, line  * column 4, line  (US 3 432 795 A (1)  11 March 1969 (199	1997-01-08) 47 - line 51 * hand column * 10 - column 9, line 38; 50,6A * (AMAICHI ELECTRONICS COUNTY ELECTRIC CO (JP)) 96-04-03) 6 - line 13 * 36 - line 40; figure 11 DAYNE MAX L) 969-03-11) res 1,2,5 *	* 1,2,4,5 *	G06F13/40
* figures 3A,5A-9  2),X EP 0 704 820 A (  LTD ;TOKYO SHIBAN  3 April 1996 (199  * column 4, line  * column 4, line  ( US 3 432 795 A (  11 March 1969 (199	GC,6A *   CAMAICHI ELECTRONICS CO  JRA ELECTRIC CO (JP))  96-04-03)  6 - line 13 *  36 - line 40; figure 11   JAYNE MAX L)  969-03-11)  res 1,2,5 *	* 1,2,4,5	
LTD ;TOKYO SHIBAU 3 April 1996 (1991) * column 4, line * column 4, line ( US 3 432 795 A (11 March 1969 (1991)	JRA ELECTRIC CO (JP)) 96-04-03) 6 - line 13 * 36 - line 40; figure 11 JAYNE MAX L) 969-03-11) res 1,2,5 *	*	
11 March 1969 (19	969-03-11) res 1,2,5 * 	1,2,4-7	
	(IH2OYU2T ATHRUSTAN		
US 4 849 944 A (1 18 July 1989 (198 * column 4, line	39-07-18)	1,2,6,7	
	(IMURA MASATOSHI)	1-9	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
US 4 889 495 A () 26 December 1989 * abstract *		1-9	G06F
	-/		
LACK OF UNITY OF INVE	NTION		]
The Search Division considers that the pre the requirements of unity of invention and namely:	sent European patent application does not co relates to severalinventions or groups of inven	mply with itions,	
see sheet B			
The present partial European search repor patent application which relate to the inver	t has been drawn up for those parts of the Eu tion first mentioned in the claims.	ropean	
Place of search	Date of completion of the search		Examiner
MUNICH	4 December 200	3 Se	ntier, L
CATEGORY OF CITED DOCUME  X: particularly relevant if taken alone Y: particularly relevant if combined with document of the same category A: technological background O: non-written disclosure	E : earlier pater atter the filin another D : document ci	nciple underlying the it document, but put g date ited in the application ted for other reasons he same patent fam	olished on, or n s

## PARTIAL EUROPEAN SEARCH REPORT

**Application Number** 

EP 98 11 4979

. 1	OCCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int.CI.6)		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim		
Α	US 5 584 030 A (HUSAK DAVID J ET AL) 10 December 1996 (1996-12-10)	1-9		
	* column 3, line 60 - column 4, line 8 * * column 4, line 27 - line 30 * * figure 1C *		TECHNICAL FIELDS SEARCHED (Int.Cl.6)	
Α	US 5 636 347 A (AJANOVIC JASMIN ET AL) 3 June 1997 (1997-06-03)	1-9		
D,X, P	* abstract *  PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06, 30 April 1998 (1998-04-30)			
	-& JP 10 049644 A (YAMAICHI ELECTRON CO LTD;TOSHIBA CORP), 20 February 1998 (1998-02-20) * abstract; figures 5,6 *			
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## LACK OF UNITY OF INVENTION SHEET B

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-9

A method for controlling the connections staggering of a memory card signals when said memory card is inserted into, or ejected from, an electronic apparatus.

2. Claims: 10-12,17,18,19,20,21

A method for controlling a memory system which includes logical blocks and physical blocks; wherein a logical/physical address translation table is used.

3. Claims: 13-14

A method for controlling a memory system wherein storage units, for managed file, are arranged on boundaries between predetermined units of a storage area.

4. Claims: 15-16

A method for controlling a memory system including files to be managed, data areas for storing the contents of said files, and a management area for storing the relationships between said files and said data areas.

5. Claim: 22

A method for controlling a non-volatile semiconductor memory system, which allows any one of various memory units to be detachably mounted in a body of said memory system, said method comprising a step of selecting a corresponding one of various error correcting means of said body in accordance with said one of various memory units mounted in said body, to carry out error correction.

The common feature linking together the above groups of invention and defined by the independent claims 1, 2, 4, 5, 6, 7, 10, 13, 14, 15, 16, 17, 19, 20, 22 and 23, is the following:

A method for controlling a memory system.

This common feature, however, does not meet the requirements laid down in Rule 30 EPC. Consequently the application lacks of unity in the sense of Article 82 EPC.

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-12-2003

	Patent document cited in search repo	rt	Publication date	,.	Patent family member(s)	Publication date
EP	0752668	Α	08-01-1997	US AU AU	5644731 A 717666 B2 5627696 A	01-07-1997 30-03-2000 23-01-1997
				CA	2180093 A1	08-01-1997
				EP	0752668 A1	08-01-1997
			•	JP	9222940 A	26-08-1997
 EP	0704820	Α	03-04-1996	JP	2609431 B2	14-05-1997
			· ·	JP	8090969 A	09-04-1996
				DE	69515951 D1	04-05-2000
				DE	69515951 T2	07-12-2000
				EP	0704820 A1	03-04-1996 18-05-1999
				US 	5905253 A	10-05-1999
US	3432795	Α	11-03-1969	NONE		
US	4849944	A	18-07-1989	JP	1983207 C	25-10-1995
		. •		JP	6090872 B	14-11-1994
				JP	63048685 A	01-03-1988
				DE	3785986 D1 3785986 T2	01-07-1993 09-12-1993
•				DE EP	0260808 A2	23-03-1988
US	4889495	Α	26-12-1989	JP -	2073589 A	13-03-1990
			•	JP	7069759 B	31-07-1995
				FR	2636174 A1	
				GB		,B 14-03-1990 03-03-1992
				US 	5092799 A 	03-03-1992
US	5584030	Α.	10-12-1996	US	5317697 A	31-05-1994
			<u> </u>	US 	5617081 A	01-04-1997
US	5636347	<b>-</b>	03-06-1997	NONE		
JP	 10049644	A	20-02-1998	JP	2843306 B2	2 06-01-1999